

# FCC RF Exposure

Product Name: Karaoke Machine for Kids

FCC ID: 2BRQM-KBS100

Model(s): KBS100-PU

## 1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 The 1 - g and 10 - g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max power of channel, including tune - up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1 - g SAR and  $\leq 7.5$  for 10 - g extremity SAR,

Where:

Result =  $P/D^2 \cdot \sqrt{F}$

F = the RF channel transmit frequency in GHz

P = Maximum turn - up power in mW

D = Min. test separation distance in mm

## 2. Test Result of RF Exposure Evaluation

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit (mW/cm <sup>2</sup> )	SAR Test Exclusion
2480	-2.02	-2 ± 1	-1/0.79	5	0.249	3.0	Pass

Note:

PK Output power = conducted power.

Conducted power see the test report HK2508064334-E, antenna gain = 2.338 dBi

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.249 which is  $\leq 3$ , RF Exposure testing is not required.

Note: Exclusion Thresholds Results =  $[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Distance = 5 mm